

VIEW FROM THE STATES

Greening the Palmetto State

South Carolina paves the way for renewable energy development.

By Erika Hartwig

Each year tourists from all over the world flock to the South Carolina beaches of Myrtle Beach, Charleston and Hilton Head — and for good reason. The Palmetto State has great weather,



Erica Hartwig

amazing food and world-class golf resorts. What it has lacked until recently was a burgeoning renewable energy industry. But the tides are beginning to change, so to speak, in South Carolina.

As energy prices rise, South Carolinians are looking for alternatives. Residents on average pay more for energy and spend a greater portion of their income on energy compared to the national average. Residents are ranked third in the nation for per capita electricity consumption and fourth in the nation for per capita motor fuel consumption. South Carolinians spend \$18 billion a year

tax incentives to individuals and businesses that produce and market ethanol and biodiesel, as well as incentives to install solar and landfill gas equipment for the production of renewable energy.

South Carolina Drives the Wheel

The South Carolina General Assembly approved one of the first sales tax rebates in the country for flex-fuel vehicles, designed to run on gasoline or any blend of up to 85 percent ethanol (E85). It approved income tax credits for the purchase of energy-efficient technologies such as plug-in hybrid vehicles (PHEVs), hybrid vehicles and hydrogen fuel cell vehicles, as well. Tax credits are also available for the purchase of PHEV-conversion equipment.

In addition to providing incentives for alternative-fuel vehicles, South Carolina has some of the nation's best alternative-fuel infrastructure. The state ranks fifth in the nation for publicly accessible E85 and biodiesel pumps, with more than 70 pumps located at 50 stations. To help make alternative fuels cost competitive

South Carolina's overdependence on imported energy has caught the attention of state legislators, who have sought to promote various renewable energy technologies.

on energy, which accounts for nearly 10 percent of the state's gross domestic product. Almost all of those energy dollars leave the state. South Carolina has no natural reserves of oil, coal or natural gas, which produce the bulk of the state's energy. However, two energy resources South Carolina does have in abundance are biomass and sunshine.

South Carolina's overdependence on imported energy resources has caught the attention of state legislators, who have sought to promote everything from alternative transportation fuels to solar energy. Last June, the South Carolina General Assembly enacted energy laws providing

with conventional fuels, the state provides a tax credit for 25 percent of fuel distribution and storage equipment costs and a 5-cent incentive payment for each gallon of B20 (a mixture of 20 percent biodiesel with 80 percent diesel) and E85 sold by a retailer.

The state also established tax incentives for the producers of ethanol and biodiesel. South Carolina not only offers a 25 percent tax credit for equipment to produce ethanol and biodiesel, but also offers 20-cents for every gallon of ethanol or biodiesel produced in the state. To date, two biodiesel facilities have come online, with a combined capacity of 40 million

gallons, and another biodiesel facility will come online this spring, with a production capacity of 30 million gallons.

Solar Energy, Green Buildings Take Front Seat

Solar energy has come a long way in South Carolina, from a cottage industry to a growing niche market. To date, the state has six solar dealers and installers. A chapter of the American Solar Energy Society, the South Carolina Solar Council, was designated in 2004, and the group has seen a jump in participation in recent years. The solar industry got a push in 2006 when the South Carolina General Assembly approved a state tax credit for up to 25 percent of the costs of solar heating and cooling equipment and installation up to \$3,500 to complement the federal credit of 30 percent of the cost of solar equipment up to \$2,000. The South Carolina Energy Office also offers a \$1,000 rebate for a builder installing solar energy equipment on an EarthCraft House — a green building designation developed by the Southface Institute.

Green buildings are becoming popular in South Carolina, particularly among universities and businesses. For the second time, legislation has been introduced to require all new state buildings with projected costs greater than \$15 million to be LEED-certified. Presidents at three universities — Clemson University, Furman University and the University of South Carolina (USC) — have pledged to make all new campus buildings LEED-certified. A model for green buildings in the state is the West Quad at USC, which at the time of construction was the largest green dorm in the United States. The West Quad was outfitted with solar water heaters and a hydrogen fuel cell, which supplies power to a sustainable living center.

RE Support, Markets Grow

Though South Carolina has hurdles to overcome, renewable energy is gaining momentum. The 2006 energy legislation established the Strategic and Tactical Research on Energy Independence Commission (STREIC) to identify ways to reduce South Carolina's dependence on petroleum products. Among its proposed recommendations to the South Carolina General Assembly are strengthening of existing incentives for alternative transportation fuels and new incentives for energy efficiency.

The STREIC has generated interest in renewable energy throughout the state, and it is hoped that with strong leadership,

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Calendar

MARCH 2007

Beginning March 3, Illinois

Solar 101 and Wind 101. Illinois Solar Energy Association, 708.267.7965, www.illinoisolar.org/workshops.

San Diego, New Jersey, Santa Cruz, Texas

Solar Electric Workshops. Contact Solar Energy International, 970.963.8855, www.solarenergy.org.

6-8, Las Vegas

POWER-GEN Renewable Energy & Fuels. Access www.power-gengreen.com.

13-15, Boston

Building Energy 2007. Contact the Northeast Sustainable Energy Association, 413.774.6051, www.buildingenergy.nesae.org.

19-22, San Antonio, Texas

NHA Annual Hydrogen Conference 2007. Contact the National Hydrogen Association, 202.223.5547, www.hydrogenconference.org.

24, San Francisco

Intro to Green Renovations. Contact the Solar Living Institute, 707.744.2017, www.solarliving.org.

APRIL 2007

New York, Utah, Colorado

Solar Electric Workshops. Contact Solar Energy International, 970.963.8855, www.solarenergy.org.

13, Custer, Wis.

Basic Photovoltaics. Contact the Midwest Renewable Energy Association, 715.592.6595, www.the-mrea.org.

21-22, Chicago

Green Festival. Contact Global Exchange, 877.727.2179, www.greenfestivals.org.

23-25, Phoenix

Renewable Energy Finance & Investment Summit. Contact Financial Research Associates LLC, 800.280.8440, www.fralc.com.

23-28 Chiapas, Mexico

Appropriate Technology for the Developing World. Contact Solar Energy International, 970.963.8855, www.solarenergy.org.

MAY 2007

1-3, Austin, Texas

2007 Environmental Trade Fair & Conference. Contact the Texas Commission on Environmental Quality's Pollution Prevention and Education Section, 512.239.3150, www.tceq.state.tx.us/assistance/events/etfc/etf.html.

Find more RE events

at the American Solar Energy Society's website: www.ases.org/events.htm.

Upcoming ASES Events

SOLAR 2007 — National Solar Conference
Sustainable Energy Puts America to Work
July 7-12, Cleveland
www.solar2007.org

SOLAR 2008 — National Solar Conference
May 3-8, San Diego

Contact the American Solar Energy Society,
303.443.3130, www.ases.org.

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renewable energy markets will continue to grow in South Carolina. Avenues to explore include the role of agriculture in biomass-to-energy development, offshore wind power and ways renewable energy can address global climate change.

For updates, access the South Carolina Energy Office website: www.energy.sc.gov. ●

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Wind Energy News

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openness and cooperation, wind energy and bird interests continue to advance at the wind-power-project level as well. Flicker noted in his column how Mass Audubon, an independent state Audubon organization in Massachusetts, recently completed an extensive review of the Cape Wind project that "set a new standard for analyzing the potential effects of wind turbines on birds."

Advancing Wind, for All Creatures' Health

Flicker told *Wind Energy Weekly* that he would do everything he could to help advance wind power. "We want to figure out ways to cooperate as much as we can to make the wind industry grow while making wind power safer for birds," he said. In his column, he encouraged readers to urge members of Congress to make the federal production tax credit for wind power — recently extended through 2008 — permanent.

Working with environmental organizations like the Audubon Society is one more way renewable energy advocates can help ensure that the broad benefits of wind power are considered in the continuing debate over America's energy and climate policies. ●

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